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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO | |
|---|---------------------------|----------------------|-------------------------|-----------------|--|
| 10/046,659 | 10/29/2001 | Kevin I. Bertness | C382.12-0105 | 3728 | |
| 75 | 90 06/18/2003 | | • | | |
| Judson K. Champlin WESTMAN CHAMPLIN & KELLY International Centre - Suite 1600 | | | EXAMINER | | |
| | | | TOATLEY, GREGORY J | | |
| 900 South Secon Minneapolis, M | nd Avenue N 55402-3319 | | ART UNIT | PAPER NUMBER | |
| • | | | 2836 | | |
| | | | DATE MAILED: 06/18/2003 | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| 3- | | Applicati n N . Applicant(s) | | , | | | | | |
|--|---|------------------------------|-----------------------|---|-----|--|--|--|--|
| Office Action Summary | | 10/046,659 | | BERTNESS, KEVIN I. | | | | | |
| | | Examiner | | Art Unit | | | | | |
| | | Gregory J. T | | 2838 | | | | | |
| The MAILING DATE of this c mmunicati n appears n the c ver she t with the correspondence address Period for Reply | | | | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status | | | | | | | | | |
| 1) | Responsive to communication(s) filed on 31 A | <u> March 2003</u> . | | | | | | | |
| 2a) <u></u> □ | This action is FINAL . 2b)⊠ Thi | is action is non-final. | | | | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | | | | | |
| Dispositi | on of Claims | Ex parte Que | 1916, 1933 C.D. 11, 4 | 33 0.0. 213. | | | | | |
| 4) Claim(s) 17-81 is/are pending in the application. | | | | | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | | | | |
| 5)⊠ Claim(s) <u>17-24 and 35-81</u> is/are allowed. | | | | | | | | | |
| 6)⊠ | 6)⊠ Claim(s) <u>25-28 and 32-35</u> is/are rejected. | | | | | | | | |
| 7)🖂 | 7)⊠ Claim(s) <u>29-31</u> is/are objected to. | | | | | | | | |
| 8) Claim(s) are subject to restriction and/or election requirement. | | | | | | | | | |
| • • | on Papers | | | | | | | | |
| 9) The specification is objected to by the Examiner. | | | | | | | | | |
| 10) ☐ The drawing(s) filed on 29 August 2002 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. | | | | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). 11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner. | | | | | | | | | |
| If approved, corrected drawings are required in reply to this Office action. | | | | | | | | | |
| 12) The oath or declaration is objected to by the Examiner. | | | | | | | | | |
| Priority under 35 U.S.C. §§ 119 and 120 | | | | | | | | | |
| 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | | | | | |
| a) ☐ All b) ☐ Some * c) ☐ None of: | | | | | | | | | |
| 1. ☐ Certified copies of the priority documents have been received. | | | | | | | | | |
| | 2. Certified copies of the priority documents have been received in Application No | | | | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | | | | |
| 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). | | | | | | | | | |
| a) The translation of the foreign language provisional application has been received. | | | | | | | | | |
| 15)⊠ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. | | | | | | | | | |
| Attachmen | | 4 |) D Intensions Summer | (PTO_413) Pages No. | (e) | | | | |
| 2) Notic | e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449) Paper No(s) 6 | | · <u></u> | (PTO-413) Paper Nor Patent Application (PT | | | | | |

DETAILED ACTION

Introduction

1. Claims 1 – 16 have been canceled by preliminary amendment. Claims 17 – 81 were added by the same amendment.

Information Disclosure Statement

Receipt is acknowledged of the information disclosure statement filed March 31, 2003, which information has been considered and entered into the application.

The information disclosure statement received has been placed in the application file, and the information referred to therein has been considered as to the merits. See the attached form PTO-1449.

The numerous references and materials listed on the submitted 16 sheets of the IDS's make it difficult to determine whether or not any of the references, or parts of the references, are material to applicants' claimed invention. It is noted that applicants, in their several IDS submissions, do not indicate any particular reference or parts of references which they deem "material" to the patentability of the pending claims under 37 CFR 1.56(b).

Applicants are reminded of the standard set forth in the leading inequitable conduct case of *J.P. Stevens & Co. v. Lex Tex* Ltd., 747 F.2d 1553, 223 USPQ 1089 (Nov. 9, 1984), *cert. denied*, 106 S.Ct. 73 (1985): Where none of the prior art cited during prosecution teaches a key element of the claim(s) and where a reference known to the applicants) does, the applicants) should know that reference is material. Thus, if applicants are aware of any cited reference from among the information disclosure(s) of

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paper number 6 that are "material," applicants should make that reference known to the examiner.

It is also noted that a "misrepresentation is material if it makes it impossible for the Patent Office fairly to assess [the patent] application against the prevailing statutory criteria." *In re Multidistrict-Litig. Involving Forst* Patent, 540 F.2d 601, 604, 191 USPQ 241, 243 (3d Cir. 1976); *see also Monsanto Co. v. Rohm & Haas Co.*, 456 F.2d 592, 600, 172 USPQ 323, 329 (3d Cir.), *ce.rt. denied*, 40'7 U.S. 934, 174 USPQ 129 (1972). And, the submission of voluminous documents in the instant information disclosure statements (here, in excess of 80 documents) make it difficult, and likely impossible, for the Patent Office to fairly assess applicants' application against the prevailing statutory criteria.

Specification

2. The examiner respectfully suggests that the Applicant carefully review the specification for idiomatic and grammatical errors, which may have inadvertently overlooked.

Claim Objections

3. Claims 26 – 28, 44 are objected to because of the following informalities: Claim 26 recites the phrase "the historical charging information ... is over the life of the vehicle." This is idiomatic in that the information is "stored" over the life of the vehicle and not over the life of the vehicle itself. Claims 27, 28 and 44 are similarly claimed. The claims were examined with the understanding that the data is stored over the claimed period of time. Appropriate correction is required.

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Art Rejection Rational

At the outset, the examiner notes that claims are to be given their broadest reasonable interpretation during prosecution. In re Zletz, 893 F.2d 319, 321, 13

USPQ2d 1320, 1322 (Fed. Cir. 1989); In re Prater, 415 F.2d 1393, 1404, 162 USPQ

541, 550 (CCPA 1969); In re Yamamoto, 740 F.2d 1569, 222 USPQ 934 (Fed. Cir. 1984); Burlington Indus. V. Quigg, 822 F.2d 1581, 3 USPQ2d 1436 (Fed. Cir. 1987); In re Morris, 43 USPQ2d 1753, 1756 (Fed. Cir. 1997). In responding to this Office action, applicants are reminded of the requirements of 37 CFR §§ 1.111 and 1.119 that applicants specifically point out the specific distinctions believed to render the claims patentable over the references in presenting responsive arguments. See M.P.E.P. § 714.02. The support for any amendments made should also be specifically pointed out. See M.P.E.P. § 2163.06.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 5. Claims 25 28 are rejected under 35 U.S.C. 102(e) as being anticipated by the reference of Gollomp et al. (US 6424157 B1). The reference of Gollomp et al. teaches of a system for monitoring the use of a vehicle storage battery which includes a

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connection of an alternator (106) to the electrical system of the vehicle (fig. 7) which includes a microprocessor (100) which measures the condition of the battery and monitors its charging by the alternator and stores historical charging and usage information over the life the vehicle and from the manufacture of the vehicle as claimed (see at least col. 3, line 44 – col. 4, line 67).

Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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7. Claims 32 – 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over the reference of Gollomp et al. as applied to claim 25 above, and further in view of the reference of Dunstan (US 5541489 A1). The reference of Gollomp is silent regarding the location of the data storage except to state that it is incorporated in to the computer (100). The reference of Dunstan teaches of the incorporation of a microprocessor and its associated memory into a battery shown at least by the "smart battery" in fig. 4. Stored in the memory of the battery in fig. 4 are various types of battery related data including a rating of a battery, specifically, characteristics 66- 68. It would have been obvious to one having ordinary skill in the art to incorporate the "smart" battery teaching of Dunstan into the battery monitoring system of Gollomp in order to provide a means to monitor a battery based upon data which unique to the individual battery, increasing the accuracy of the battery related measurements.

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Allowable Subject Matter

8. Claims 17 – 24, 35 – 81 are allowed.

- 9. Claims 29 31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 10. The following is a statement of reasons for the indication of allowable subject matter: Prior art of record does not teach or suggest the output of a microprocessor related to the combination of a battery condition, a charge applied to the battery and a drive cycle of a vehicle as claimed in claims 17 and 29; the use of a four point Kelvin connection, as claimed in claim 30; the use of a time varying signal to determine a battery condition as claimed in claim 31; the use of a microprocessor which gathers data points in order to determine a loss on one or more phases of the output of an alternator as claimed in claim 35; a controllable load and the reduction of that load based upon the state of charge of a battery as claimed in claim 45; the detection of the failure of starter motor based upon a measured time to start a vehicle as claimed in claim 54; the detection of the failure of starter motor based upon a measured current required to start a engine of a vehicle as claimed in claim 65; and the sensing of a replacement of a battery in a vehicle and the detection that the charge capacity of the battery is less than a given threshold as claimed in claim 74.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory J. Toatley, Jr. whose telephone number is 703-308-7889. The examiner can normally be reached on Mon. - Thurs. 6:30 a.m. to 5 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on (703) 308-3119. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9318 for regular communications and 703-872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1782.

Gregogy o∕loaney, J Primady Examiner Page 7

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GJT Jr. June 13, 2003